21/12 (cont.)

locations in the United States.

In 1987, Y-12 was operating at a level that was contributing to the eventual listing of the Oak Ridge Reservation on the National Priorities List.

It can not be presumed that any level of activities which contributed to Y-12's recognition as one of the nastiest places in the country was an acceptable level of contamination.

The No Action alternatives

DOE presents two No Action alternatives in the Y-12 SW-EIS, both of which are actually variations of "continuing action." Justifying this approach, DOE cites its own Guidance on NEPA which are drawn from the Council on Environmental Quality's guidance (40 Questions):

> No Action "can mean continuing with present course of action with no changes; can mean discontinuing present course of action by phasing out operations in the near term." (DOE, May 1993, Recommendations for Prep...)

DOE quickly dismissed the No Action alternative (1998) because it would not allow DOE to reach its self-imposed goal of completing the Y-12 Site Integrated Modernization program in order to continue nuclear weapons production into the future. The rationale for DOE's dismissal of the No Action 1998 alternative flows thus:

- "By law, DOE is required to support the Nuclear Weapons Stockpile Plan." (3-83)
- DOE recognizes that Y-12 has unique capabilities and diverse roles supporting a variety of national programs... (3-83)
- Until relieved of its mission to support the enduring nuclear weapons stockpile by the President and Congress, DOE must maintain its DP operations at the Y-12 Plant. (3-83)

These arguments not withstanding, this dismissal of No Action (1998) appears to be premature in the face of CEQ regulations which insist that federal agencies give serious consideration to the No Action alternative even if under court order or legislative command to act (10 CFR 1021.312(c)). If DOE has no discretion, action is not subject to NEPA review (40 CFR 1508.18; 10 CFR 1021.104(b)).

The intent of the CEQ regulations is not difficult to discern—an agency must not only examine the environmental impacts of its proposed action, it must also tell the public what the impacts will be if it does not undertake the proposed action. In the Y-12 SW-EIS DOE fails to do this in any detailed manner.

22/25

DOE's dismissal of a true No Action, meaning no further production activity/Site Closure with Environmental Restoration also begs the question of whether Y-12 is the only place DOE can do the things it claims Congress and the President compel it to do. While the previous PEIS decisions point DOE to Y-12, they can not compel DOE to undertake activities here if further, more thorough environmental review in the Site Specific EIS indicate the decision is unwise, imprudent, or would place workers, the public or the environment at significant risk. *The purpose of the Y-12 SW-EIS is to undertake that examination.*

Full analysis of alternatives

Under the alternatives which include significant new construction (HEU facility and Special Materials Complex) enormous physical structures which currently house those operations would become surplus to DOE. The condition of these structures which now compels DOE to consider their replacement (age, levels of contamination, structural integrity), would dictate their decontamination and decommissioning ("D&D") when their current missions are moved to new facilities. The Y-12 SW-EIS alludes to this as a possibility, but absent any clear rationale for keeping old, dangerous, contaminated buildings around, the path to D&D must be considered the most likely.

23/12

The decontamination and decommissioning, and the eventual demolition of these structures are clearly connected to the actions proposed and the decisions resulting from this EIS—the environmental, economic, and social impacts of those D&D

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preferred alternatives outlined in the Waste Management PEIS ROD. As a result of this ROD, the current disposal options for LLW and mixed LLW at Y-12 will not change. The text in the Summary, Section S.4 and Volume I, Section 5.11.1 of the Final SWEIS has been changed to reflect the recent EM ROD and the available disposal capabilities at the Nevada Test Site for ORR LLW and mixed LLW. The Production Waste Storage Facility (Section A.5.1.11) and the Liquid Organic Solvent Storage Facility (Section A.5.1.13) have sufficient capacity to handle expected waste streams. The contents of the facilities are transferred as appropriate to other facilities for processing, treatment, or disposal as explained in the SWEIS. They are not long-term permanent storage facilities. These facilities are permitted facilities which means that they cannot exceed the capacity set in the permit. The Production Waste Storage Facility is a RCRA-permitted facility with a design capacity for storage of 616,968 gal (2,335 m^3). The Liquid Organic Solvent Storage Facility is also a RCRA-permitted facility with four 6,500 gal (24,600 L) and two 3,000 gal (10,400 L) stainless steel tanks for storage of ignitable non-reactive liquids. The Liquid Organic Solvent Storage Facility tanks are used primarily for interim storage of solvent waste streams prior to processing.

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The Scarboro Community Environmental Study referred to by the commentor did not conclude that significant contamination was present in the Scarboro Community nor was it subjected to dispropotionately high and adverse impacts by Y-12 operations. The Joint Center for Political and Economic Studies (Center) (see Section D.6.3, Volume II) reviewed the reference study along with other recent studies that pertained to the Scarboro Community. In the *Joint Center Summary Number 3 "Scarboro Community Environmental Study (Summary),"* the Center stated "The study found that the concentrations of mercury in Scarboro soils are within the range that has been observed in other

activities should be examined in the Y-12 SW-EIS.

Except for a brief and relatively tiny impact during construction phases, there are no economic benefits (in terms of increased employment or regional economic impact) associated with any of the alternatives presented in the Y-12 SW-EIS. (It is not clear from the data on S-34 how many people are employed at Y-12—the top of the page says 5,300 workers, near the bottom the number is given as 8,900; presumably DOE's EIS writer can come to some agreement with him/herself on the number for the final EIS.)

24/17

In addition, all alternatives deemed "reasonable" by DOE would result in the continued operation of many current facilities at Y-12 (II, A-18). Issues related to fire safety, structural integrity, and other environment, safety and health issues related to the ongoing use of these aging structures is not fully explored in the Y-12 SW-EIS, nor is their replacement.

25/14

The Y-12 SW-EIS gives peeks into pieces of these facilities, noting, for instance, that Building 9204-2 is being modified for HEU storage and that Building 9204-2E is "generally in good condition except for a structural problem with the west wall and deterioration of the third floor from Kathene leakage." (II, A-27).

These and other unreported issues are unexamined in the Y-12 SW-EIS, rendering it considerably less than a "site-wide" EIS. The Y-12 SW-EIS fails the public and the law when it overlooks environment, safety and health issues at current facilities which will continue to operate under DOE's proposed alternatives.

SAFETY : FIRE

The potential for fire at the Y-12 Plant is one of the most serious accident scenarios possible for four reasons:

- many materials used at Y-12 are highly flammable and some (HEU) are pyrophoric—HEU dust can spontaneously combust when exposed to air;
- fire has the potential to release large quantities of radioactive and hazardous materials into the air (and water, in the effort to extinguish the fire);
- fire places workers, fire safety and emergency response personnel, and the public at significant risk from exposure to materials released in fires;
- Y-12 has a recent history of casualness about fire safety.

Fire hazards were first publicly identified at Y-12 in the Highly Enriched Uranium Vulnerability Assessment conducted by DOE in 1996 (*Highly Enriched Uranium Working Group Report on the Environmental, Safety and Health Vulnerabilities Associated with the Department's Storage of Highly Enriched Uranium*, DOE/EH-0525, Vol. 2, No. 1, December 1996.

In describing the current state of fire safety at Y-12, the Y-12 SW-EIS makes reference to the corrective action plans resulting from the Vulnerability Assessment. The Y-12 SW-EIS does not confirm that the corrective actions presented in the plans have actually been implemented.

The Y-12 SW-EIS also offers other assurances: in addressing fire safety in Building 9995 (II, A-30) the Y-12 SW-EIS says "chemical reactions resulting from the mixing of incompatible chemicals are expected to be small" because sample sizes are limited and operations are performed according to procedures. In light of the criticisms in the investigation following the December, 1999 chemical explosion at Y-12, these assurances are hollow.

26/15

Since 1998, the Defense Nuclear Facilities Safety Board has persisted in raising unresolved fire safety questions at the highest level of DOE's administration. It is clear from the Safety Board reports that DOE has not been sufficiently responsive to the Safety Board's concerns. The picture presented to the public is one of an agency that simply refuses to embrace fire safety at a level appropriate to the risks posed by fire at the Y-12 site.

The Y-12 SW-EIS must come clean about fire safety, informing the public about the current status of fire prevention efforts and fire suppression systems, and must demonstrate to the public a new resolve, reflected in more than simple assurances on

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areas with similar soil around the world. This suggests that health risks from contact with mercury in Scarboro soils are no different than the risks experienced by people living near soils with naturally occurring mercury."

The *Center's Summary* also stated "Other ways a person could be contaminated, such as by eating contaminated fish or drinking contaminated water, were not studied. This last fact should have little effect on the results because Scarboro gets its water from the Oak Ridge public water supply, which is upstream from ORR, and the State of Tennessee has issued a "fish advisory" cautioning residents not to eat fish from the East Fork Poplar Creek and to avoid contact with the water." The *Center's Summary* continues "Researchers calculated that the maximum dose that could be experienced by Scarboro residents from exposure to uranium would be 0.36 mrem/year. This maximum dose is only 1/800 of the overall annual radiation dose that the average American receives in a year (300 mrem). Therefore, even Scarboro residents exposed to contaminants through soil, air, water, and fish are not expected to reach the maximum allowable dose. These estimated exposure levels are therefore not expected to cause harm to health."

In the Conclusions section of the *Summary*, the Center states "The concentration of radioactive materials, mercury, and other metals of environmental concern in Scarboro soils do not exceed the concentrations in soils reported in the background study conducted at ORR, upper Anderson County, and lower Roane County. The potential radiation dose estimated for uranium in Scarboro soils is a very small fraction of the levels of radiation that an average American experiences in a year, suggesting that Scarboro residents are not at increased risk of health problems due to uranium."

Concerning pesticides found during sampling, the *Center's Summary* stated "The only organic compounds of environmental concern detected in Scarboro soils were pesticides. They were found at only